Last Updated 01/18/08

CONTRACT SUMMARY

This information will made available to the public on the State Water Resources Control Board's (SWRCB) Website (see address below).

Use the "tab" and arrow keys to move through the form. If field is not applicable, please put N/A in block.
Date filled out January 14, *2008*

A) Contract Information **Please use complete phrases/sentences. Fields will expand as necessary as you type.**

1. Contract Number: *03-068-550-0*

2. Project Title: *Air Emission Studies in Conjunction with Permitting and Operating of Animal Feeding Operations*

3. Project Purpose – Problem: (problem being addressed) *Merced County certified a Final Environmental Impact Report (EIR) in 2002, which analyzes the environmental impacts of the revisions of the Ordinance and cumulative impacts from animal confinement facilities. The major issues analyzed in the EIR include: impacts to water quality, air emissions, odors, and vectors. Air emissions from dairies are a significant environmental issue. Reactive organic gases, ammonia, and PM10 are primary air emission concerns identified in the EIR. Merced County developed the proposed air emission requirements because the EIR identified dairies as significant generators of air pollutants.*

However, the specific locations on a dairy where the air emissions are generated are not quantified and the specific control measures with measurable air emission reductions have not been identified. The manner in which manure is managed impacts both air emissions and water quality. For example, if a lagoon is covered to prevent the emission of reactive organic gases, the form of nitrogen in the effluent for the crop application fields may change from the ammonia form to the organic nitrogen form. Conversely, if the lagoon is aerated the form of nitrogen applied to the crop application fields may be in the form of nitrate or ammonia. It is important to understand how air emission controls will impact the form of nitrogen applied to the crops so that excessive amounts of nitrogen are not applied. Over application of nitrogen in excess of crop uptake may cause nitrogen to move below the root zone into groundwater. Air emission control techniques such as watering corrals to control dust may also impact surface or groundwater quality. These examples show the importance of studying the relationships between air emission control measures and groundwater protection.

The study results provided for consistent application of data regionally, and possibly statewide, thus strengthening the technical merits of CEQA documents and successful adoption of ordinances that include water quality protections. Without these air studies it is unlikely that the county dairy ordinances can be implemented, therefore potentially impacting water quality.

4. Project Goals:

a. Short-term Goals: *The goals of this project were to study and recommend mitigation technologies and best management practices for the following dairy farm processes: a) animal feeding, housing and management and b) manure handling and treatment, as they relate to the reduction of air emissions and the protection of surface and groundwater.*

b. Long-term Goals: *This developed a current quantifiable air emission values attributed to animal feeding operations that may be incorporated into mitigation measures for CEQA requirements identified in the County Program Environmental Impact Reports for animal feeding operations.*

Provide for consistent application of data regionally, and possibly statewide, thus strengthening the technical merits of CEQA documents and successful adoption of ordinances that include water quality protections.

5. Project Location: (lat/longs, watershed, etc.) *Two facilities will be used for the project studies:*

1) A drylot air emission testing facility at the University of California, Davis campus.

2) A manure management air emission testing facility at a commercial dairy in Merced County.

a. Physical Size of Project: (miles, acres, sq. ft., etc.)	**b. Counties** included in the project:
U.C. Davis Facility: 50,000 sq. ft. area *Merced County Facility: 15 circular manure tanks (15 ft. diameter, 6 ft. depth)*	*Merced County and Yolo County*
c. Legislative Districts: (Assembly and Senate) *Merced County Assembly: District 17* *Merced County Senate: District 12* *Yolo County Assembly: District 2 and District 8* *Yolo County Senate: District 5*	

6. Which SWRCB program is funding this contract? Please put an "X" by the one that applies.

_X_ Prop 13 ___ EPA 319(h) ___ Other

B) Contract Contact: Refers to contract project director.

Name: *Jeff Palsgaard*	**Job Title:** *Director of Environmental Health*
Organization: *Merced County Environmental Health*	**Webpage Address:** *www.co.merced.ca.us*
Address: *777 West 22nd Street, Merced, CA 95340*	
Phone: *(209) 381-1087*	**Fax number:** *(209) 384-1593*
Email: *jpalsgaard@co.merced.ca.us*	

C. Contract Time Frame: Refers to the implementation period of the contract.

From: *October 1, 2003*	**To:** *December 31, 2006*

D) Project Partner Information: Name all agencies/groups involved with project.

Subcontractors:

University of California, Davis

One Shields Ave.

Davis, CA 95616

(530) 754-7670

E) Nutrient and Sediment Load Reduction Projection (if applicable):

N/A

PLEASE PROVIDE A HARD COPY AND AN ELECTRONIC COPY TO YOUR CONTRACT MANAGER AND YOUR PROGRAM ANALYST WITH YOUR QUARTERLY/MONTHLY REPORT. ALL APPLICABLE FIELDS ARE MANDATORY. IF FIELD IS NOT APPLICABLE, PLEASE PUT N/A IN BLOCK. INCOMPLETE FORMS WILL BE RETURNED. THE ELECTRONIC VERSION OF THIS FORM CAN BE FOUND AT: http://www.swrcb.ca.gov/nps/319hproj.html.